

Fuel Sample Buddy

Takes the Plunge

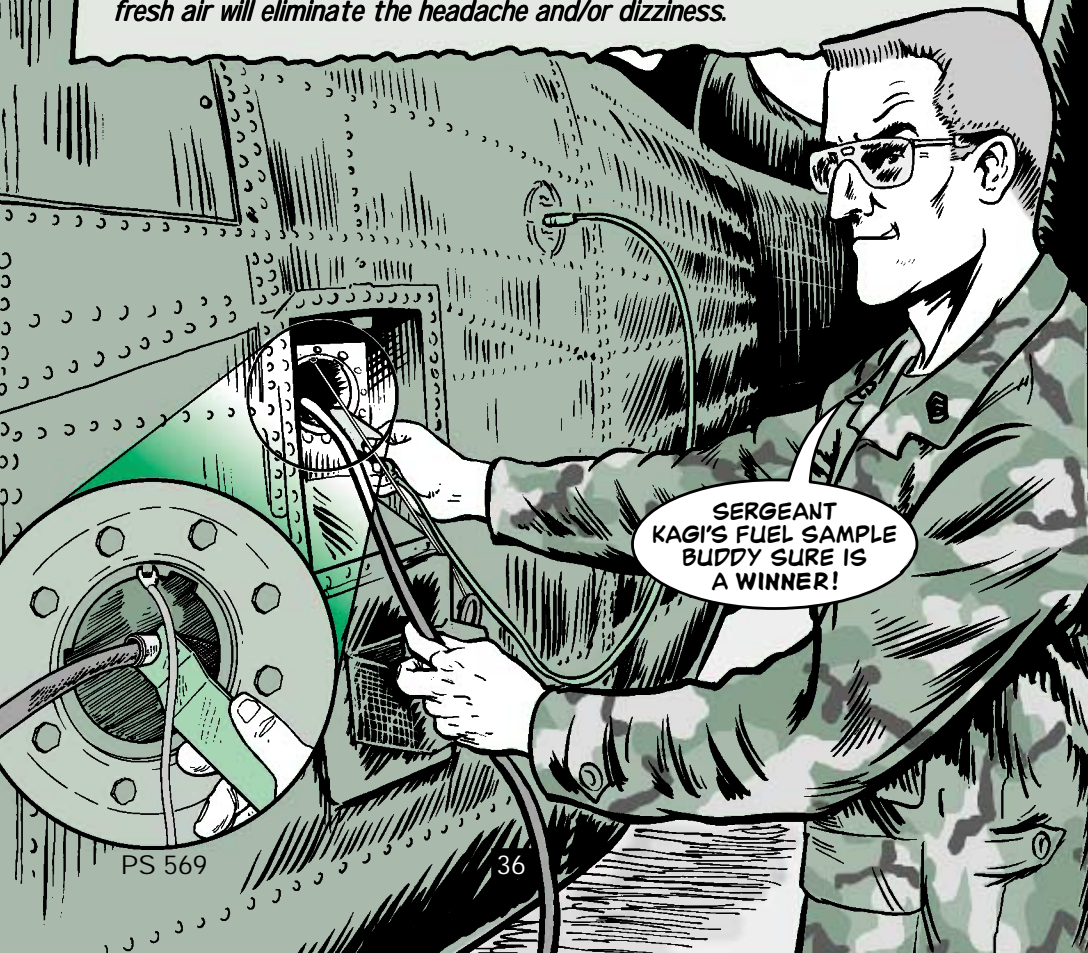
Dear Editor,

The plastic tube that goes to the bottom of the Black Hawk's fuel tank sump—the tube you must insert your fuel sample hose into—does not line up with the fuel port.

Too often, the sample taker has to dip his hand into the fuel, grab the tube and hold it in line with the fuel port. Once lined up, the fuel sample test hose fits into the tube and the sample is taken.

Getting your hands wet with fuel can be dangerous. Just read the material safety data sheet (MSDS) for JP-8. It can irritate or infect the skin and its fumes can cause headache and dizziness.

Warm soap and water will ease skin infection and irritation and breathing fresh air will eliminate the headache and/or dizziness.



But, I've made a tool that eliminates the need for the soldier to get his hands wet at all. I call it the "fuel sample buddy" because it takes the plunge and grabs the tube for you.

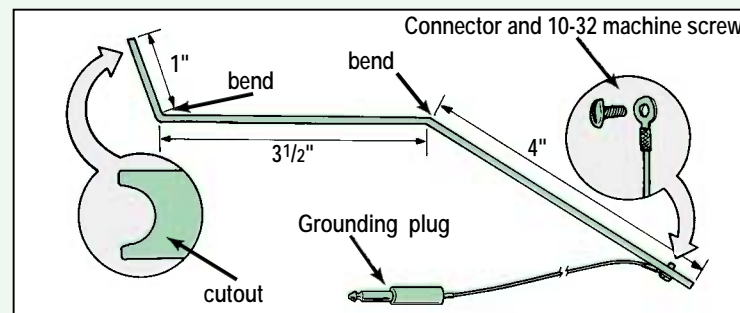
Your sheet metal folks can make this tool for you. They'll need these parts:

NSN	Description	Qty
9535-00-232-0405	.090-in aluminum, 4x12-ft sheet	8x1 1/8 inches
4010-00-286-2681	Wire rope, .093-in dia, 1000-ft roll	36 inches
5305-01-025-5769	Machine screw, 10-32	1
5310-01-111-9441	Hexagon nut, 10-32	1
5935-00-574-5714	Plug, tip, ground connector	1
5930-00-143-4794	Connector, 10-32	1

Here's how to make the "buddy":

1. Cut an 8 1/2 x 1 1/8-in piece of aluminum.
2. Take a nickel and trace half of it at one end of the aluminum. Cut it out.
3. Make two bends in the metal tool as shown in the drawing.
4. Crimp the 10-32 connector to one end of the cable and attach it to the straight end of the tool with the 10-32 machine screw and nut.
5. Attach the grounding plug to the other end of the wire rope.

CAUTION: make sure the helicopter is adequately grounded before attaching the ground plug to the helicopter.



Now you're in business. With your "sample buddy" holding the fuel tank tube in place, you insert the sample hose into the fuel tank tube and siphon the fuel into your sample jar. The "sample buddy" takes the plunge—eliminating messes and potential health problems—and its cable grounds the tool and keeps it from falling into the tank.

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